

REMARKS

Claims 1-26 are rejected. Claim 1 has been amended. Claim 26 has been canceled. Claims 1-25 are presently pending in the application. Favorable reconsideration of the application in view of the following remarks is respectfully requested.

The basis for the amendment of claim 1 is found in original claim 26, as well as pg. 6, lines 20-21 ("*After the dye indicia is transferred, the protection layer is then transferred on top of the dye image.*") and pg. 10, lines 26-31 ("*By using a donor web to transfer the indicia to the backside of an imaging element, at least one environmental protection laminate area, also referred to herein as an environmental protection layer, may be applied to the indicia. The laminate area may cover the entire transfer sheet or over only areas of the transfer sheet and transfer of the protection area may correspond accordingly.* ") of the specification as originally filed.

Rejection Of Claims 1-26 Under 35 U.S.C. §103(a):

The Examiner has rejected Claims 1-26 under 35 U.S.C. 103(a) as being unpatentable over Campbell (5,612,283) in view of Chang (6,476,842) indicating that Campbell discloses a dye-receiving element for thermal dye transfer comprising a support having on the front side thereof, in order, a biaxially-oriented composite film laminated thereto and a dye image-receiving layer, the composite film comprising a microvoided thermoplastic core layer and at least one substantially void-free thermoplastic surface layer, the support having on the back side thereof a biaxially-oriented transparent film laminated thereto which has a light transmission of at least 70%, the ratio of thickness of the transparent film to the composite film being from about 0.45 to about 0.75. Due to the low cost and good appearance, composite films are generally used and referred to in the trade as "packaging films." The low specific gravity of microvoided packaging films (preferably between 0.3-0.7 g/cm.^{sup.3}) produces dye-receivers that are very conformable and results in low mottle-index values of thermal prints, these microvoided packaging films also are very insulating and produce dye-receiver prints of high dye density at low energy levels, the nonvoided skin produces receivers of high gloss and helps to promote good contact between the dye-receiving layer and the dye-donor film. This also enhances print uniformity and efficient dye transfer, and, in products made by a

typical extrusion lamination process, back printing labels, water marks and logos are applied directly to the back side of the paper support stock with inks applied by a gravure printing process, making it desirable to have such "back printing" indicia be visible, however, the reference is not specific as to the method of printing the indicia. The Examiner then indicates that Chang discloses a method of printing indicia employing a thermal dye transfer to a substrate, making it obvious to one of ordinary skill in the art to prepare the material of Campbell choosing to employ the improved method of forming an indicia taught by Chang with reasonable expectation of achieving a support having good light transmission.

Campbell discloses a dye-receiving element for thermal dye transfer comprising a support having on the front side thereof, in order, a biaxially-oriented composite film laminated thereto and a dye image-receiving layer. The composite film comprises a microvoided thermoplastic core layer and at least one substantially void-free thermoplastic surface layer, the support having on the back side thereof a biaxially-oriented transparent film laminated thereto which has a light transmission of at least 70%, the ratio of thickness of the transparent film to the composite film being from about 0.45 to about 0.75.

Chang discloses thermal printing improvements which relate to print energy absorbers, arranged so as not to alter printed characteristics of colorant, and in which pre-heaters lessen the amount of print energy necessary to effect printing. D2T2 printing with a laser print energy source is disclosed.

The present invention relates to a method for placing indicia on the non-image side of a support for an imaging element comprising providing a support having an image side with at least one imaging layer and a non-image side, contacting the non-image side of the support with a thermal transfer dye donating sheet; applying energy in a pattern, transferring the pattern to the non-image side of the support to form indicia, and applying an environmental protection laminate layer to the indicia on the non-image side of the support.

To establish a prima facie case of obviousness requires, first, there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references (or references when

combined) must teach or suggest all the claim limitations. The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

The establishment of a prima facie case of obviousness requires some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Campbell mentions thermal printing, but only to impart an image to the front-side dye receiving element, not the non-image side of the support. (Abstract (“*A dye-receiving element for thermal dye transfer comprising a support having on the front side thereof, in order, a biaxially-oriented composite film laminated thereto and a dye image-receiving layer,*”); col. 2, lines 2-12 (“*...a dye-receiving element for thermal dye transfer comprising a support having on the front side thereof, in order, a biaxially-oriented composite film laminated thereto and a dye image-receiving layer, the composite film comprising a microvoided thermoplastic core layer and at least one substantially void-free thermoplastic surface layer, the support having on the back side thereof a biaxially-oriented transparent film laminated thereto...*”). Campbell fails to teach thermal transfer printing on a support, absent a dye receiving layer on the support. Campbell also fails to teach thermal transfer printing on the non-image side of the element and fails to disclose the application of an environmental protective layer limited to the area covered by the indicia. Chang discloses thermal transfer printing, but fails to teach the use of an environmental protection layer or application of the protection layer only to the indicia. The references, alone and in combination, fail to teach the application of an environmental protection layer to only the indicia, applied by thermal dye transfer, to the back-side of an imaging element.

The references, alone and in combination, provide no reasonable expectation of success. The references fail to provide any disclosure relating to thermally transferred protective layers or thermally transferred protection layers which are only applied to the transferred indicia, thereby minimizing the amount and cost of protective laminate materials required. The references also fail to

disclose the presently solved problems of deterioration of back side indicia (see pg. 11, lines 17-21 (*"the protection layer provides superior protection against image deterioration due to exposure to light, photographic processing chemicals as well as many other household chemicals, such as grease and oil from fingerprints, and plasticizers from film album pages or sleeves made of poly(vinyl chloride)."*)))

Finally, the prior art references, alone or when combined, fail to teach or suggest all the claim limitations. The references fail to disclose the application of an environmental protection laminate layer to the indicia on the non-image side of the support.

The present invention also provides a surprising result. As can be seen from the data in Table 1 on pg. 64 of the specification as originally filed, the performance of an ink that is under a protection layer shows no loss in dye density before or after exposure to extremes of pH, as would be encountered during the development process of a photographic imaging element bearing an imaging layer of the image side of the element. In the case of sample 2, that has the indicia transferred to the back side of the element and then overcoated with the protective layer, there is no observable loss in dye density to either high or low PH conditions encountered in the development of photographic elements. Sample 3, without the protection layer, experiences some dye density loss when exposed to different pH conditions.

It is believed that the foregoing is a complete response to the Office Action and that the claims are in condition for allowance. Favorable reconsideration and early passage to issue is therefore earnestly solicited.

Respectfully submitted,


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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.